

(19)



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11)

EP 1 061 795 B1

(12)

EUROPEAN PATENT SPECIFICATION

(45) Date of publication and mention
of the grant of the patent:
15.01.2003 Bulletin 2003/03

(51) Int Cl.7: A01K 15/02

(21) Application number: 99909940.1

(86) International application number:
PCT/US99/05148

(22) Date of filing: 08.03.1999

(87) International publication number:
WO 99/045763 (16.09.1999 Gazette 1999/37)

(54) BOUNCING PET TOY

AUFPRALENDES SPIELZEUG FÜR HAUSTIERE

JOUET A REBOND POUR ANIMAL DE COMPAGNIE

(84) Designated Contracting States:
DE FR GB

(72) Inventor: MARKHAM, Joseph, P.
Arvada, CO 80005 (US)

(30) Priority: 12.03.1998 US 41218

(74) Representative: Grünecker, August, Dipl.-Ing.
Patentanwälte
Grünecker, Kinkeldey, Stockmair & Partner
Maximilianstrasse 58
80538 München (DE)

(43) Date of publication of application:
27.12.2000 Bulletin 2000/52

(56) References cited:
WO-A-97/47186 US-A- 3 830 202
US-A- 5 647 302

(73) Proprietor: Bounce, Inc. doing business as The
Kong Company
Golden, Colorado 80403-1641 (US)

Description

[0001] This invention relates to a pet toy for entertaining an animal and providing jaw exercise, teeth cleaning and/or gum massaging for the animal. The pet toy comprising an elongated hollow body, having an outer peripheral surface extending along a longitudinal axis and having first and second spaced bulbous sections and a center section between and connected to said first and second bulbous sections.

[0002] Play toys for animals, and particularly dogs, have been available for years in various sizes and configurations, each designed to provide jaw exercise and to enhance the animals' interest in playing with the toy. Enhanced interest in the toy may occur by giving it a physical configuration which will bounce in odd directions when tossed onto the floor or ground. Also interest in a pet toy can be enhanced by providing food treats in the pet toy. Many pet toys provide one or both of these features with varying success. Examples of such toys are found in U.S. design patents Des. 234,789 and Des. 234,790 to Rosenberg, each entitled "Sounding Toy for Pet Animal", and U.S. design patent Des. 256,958 to Markham, entitled "Pet Toy". This latter pet toy is hollow and has an irregular outer configuration and provides substantial jaw exercise for the animal.

[0003] A further example of such a prior art pet toys is U.S. Patent Re. 34,352 to Markham, entitled "Therapeutic Pet Toy". This pet toy has an irregular outer configuration and a central core extending therethrough. A series of longitudinally spaced peripheral grooves are provided which have inwardly projecting lips for cleaning the teeth of the animal. The hollow core facilitates deformation of the pet toy with the animal bites into the grooves. The resistance of the pet toy to deformation provides exercise for the animal's jaw.

[0004] WO-A-97/47186 discloses a pet toy product for holding animal treats, wherein the toy has an outer surface with one or more recesses capable of holding animal treats. The recesses may be of varying depth so that the treats in the deeper recesses are more difficult for the animal to extract than are the treats in the shallower recesses. The recesses may be of various configurations and shapes to accommodate different sized animal treats. In addition the outer surface of the toy may be raised to accommodate the recesses or alternatively, the recesses may extend into the surface of the toy. Also, WO-A-97/47186 discloses that the pet toy may have a recess forming an opening which extends through the side wall of the pet toy and thereby is capable of receiving a pet treat that extends into the toy itself. Thus, because some treats will be more difficult than others to remove, the animal maybe kept occupied for several hours before the treats need to be replenished.

[0005] US Patent No. 5647302 discloses a pet toy that is claimed to an animal dental hygiene device. The pet toy disclosed is of a general bone-shaped body that is made of a tough rubber-like material into which is

formed a plurality of opposing spiral grooves. When an animal bites into the spiral grooves of the pet toy, the animal's teeth are supposedly scrapped and cleaned by the grooves. This document also discloses that the pet toy may possess a hollow core along its longitudinal axis. The hollow core may contain a rope or strip of other material in order to make the device larger and thus more difficult for a dog or other animal to swallow.

[0006] US 3830202 discloses a pull toy for pets that includes a cord extending through the toy's longitudinal axis that may be grasped by the teeth of an animal. The cord is arranged to slidably move a predetermined distance through the body of the toy when an animal tugs on the cord, after which the pet must move the entire weight of the toy when pulling on the cord. The pet toy disclosed also includes a plurality of grooves located on the surface of the pet toy, such that they are situated in planes perpendicular to the longitudinal axis of the toy. The grooves on the pet toy are irregularly spaced along the longitudinal axis of the toy to offer resistance to its movement over a smooth or rough surface.

[0007] In order to improve pet toys, this invention provides a pet toy for entertaining and providing jaw exercise according to claim 1. The pet toy has an elongated hollow body extending along a longitudinal axis having first and second ends and a side wall of substantially constant cross-section throughout. A first bulbous section has a first opening defining a first inner diameter, the first bulbous section forming the first end of the elongated body. A second bulbous section has a second opening defining a second inner diameter, the second bulbous section forming the second end of the elongated hollow body and spaced from the first bulbous section. A center section is provided which extends along the longitudinal axis between the first and second bulbous sections and is connected at opposite ends to both sections. The first and second openings form one continuous opening through the pet toy. The center section surrounds a narrowed diameter opening portion which lies between the first and second bulbous sections and has a third inner diameter. A plurality of spaced ribs extend around the periphery of the pet toy to facilitate an animal gripping the pet toy with its teeth, each of said pairs of ribs defining a first narrow groove therebetween and adjacent pairs of ribs defining a second wider groove therebetween.

More particularly, at least one of the bulbous sections has an opening having a diameter greater than the inner diameter of the center section so that a knot of a pull rope extending through the center of the pet toy will pass through the opening in the bulbous section but will not pass through the center section. Also, edible food treats can be placed in the pet toy through the opening(s) in the respective bulbous sections and the center section.

[0008] In a preferred embodiment of the invention, an elongated hollow body extends along a longitudinal axis and has first and second ends and a central hollow core of a substantially constant diameter. The first bulbous

section has a first outer diameter and a first wall thickness forming the first end of the elongated hollow body extending along said longitudinal axis. A second bulbous section has a second outer diameter and a second wall thickness forming the second end of the elongated hollow body and is spaced from said first bulbous section. A center section lies along the longitudinal axis between and is connected to the first bulbous section and the second bulbous section. The center section has a thin deformable side wall whose outer diameter is less than at least one of the first and second outer diameters and has a third thickness which is less than at least one of the first and second thicknesses.

[0009] Additional advantages of this invention will become apparent from the detailed description of this invention taken in conjunction with the accompanying drawings.

Brief Description of the Drawings

[0010]

Figure 1 is a perspective view of one embodiment of the pet toy of this invention;
 Figure 2 illustrates the irregular bouncing action of the pet toy when it is tossed on the ground;
 Figure 3 is a longitudinal vertical section, taken along line 3-3 of Figure 1, showing the uniform cross-section of the pet toy and the relationship of the respective diameters of the bulbous sections and the center section;
 Figure 4 is a vertical section, taken along line 4-4 of Figure 3;
 Figure 5 is a vertical section, taken along line 5-5 of Figure 3;
 Figure 6 is a longitudinal vertical section through the pet toy of this invention showing the insertion and use of a pull rope therewith;
 Figure 7 is a longitudinal vertical section through the pet toy of this invention showing the insertion of an edible food treat therein;
 Figure 8 is a fragmentary vertical section of the left end of the pet toy showing a jaw of an animal biting down on the pet toy so that the ribs of the pet toy engage the sides of the teeth and the gums of the animal;
 Figure 9 is a fragmentary enlarged vertical section showing details of the engagement of the teeth and gums of the animal with the ribs; and
 Figure 10 is a longitudinal vertical section of another embodiment of the pet toy of this invention.

Best Mode For Carrying Out the Invention

[0011] As best seen in Figures 1 and 3, the pet toy 10 of this invention has an elongated body extending along axis 12 wherein the elongated body includes a first bulbous section 14 having first and second ends and a sec-

ond bulbous section 16 having first and second ends and spaced from the first bulbous section 14. These bulbous sections are interconnected by a center section 18 which also has first and second ends. As clearly seen

- 5 In Figure 3, the side wall 19 defines a cross-section which is substantially uniform throughout. This uniform cross-section facilitates the irregular bouncing action of the pet toy when tossed so that it bounces along an irregular path, such as path 20 shown in Figure 2. This creates interest in the pet toy by an animal such as dog 22. Conveniently, each bulbous section 14 and 16 has a plurality of pairs of spaced ribs 24, each pair forming a first narrow groove 26 therebetween to facilitate an animal gripping the pet toy with its teeth. A second wider groove 27 is formed between the pairs of ribs 26, as shown. Conveniently, the animal can deform the pet toy by biting down on the bulbous sections.
- 10 [0012] Bulbous section 14 has an outer diameter and bulbous section 16 has a similarly sized outer diameter.
- 15 20 In the embodiment shown, although the outer diameters are the same, it will be understood that one of ordinary skill in this art could construct a pet toy having bulbous sections of different diameters to modify the bouncing characteristics of the pet toy. The center section 18 has a third outer diameter which is less than at least one of the first and second outer diameters. Center section 18 is positioned along longitudinal axis 12 between bulbous section 14 and bulbous section 16 and is connected to both.
- 25 30 [0013] Additionally, bulbous section 14 has an opening 28 at its first or outer end. This opening 28 defines a first inner diameter. Bulbous section 16 has an opening 30 at its first or outer end. This opening 30 defines a second inner diameter. The first and second inner diameters are greater than a third inner diameter of center section 18 which forms a surface which defines opening 32 therethrough.

- 35 [0014] This arrangement provides several advantages. First, as shown in Figure 6, when used with a pull rope 34 having a knot 36 at one end thereof, the knot is sized to be small enough to pass through an opening in a bulbous section, such as opening 28 in bulbous section 14, but is larger in diameter than the third inner diameter of opening 32 in center section 18. Accordingly, the knot engages the interior surface of center section 18 which serves as an anchor point for knot 36. The free end of rope 34 may then extend through opening 30 in bulbous section 16 so that it can serve as a pull rope. It is readily apparent that the direction of the rope can be reversed so that knot 36 passes through opening 30 of bulbous section 16 and bears against the opposite side of the interior surface of center section 18 as an anchor with the rope 34 passing through opening 28 in bulbous section 14. Furthermore, it will be understood that one of openings 28 and 30 could be smaller in diameter than the diameter of knot 36 so long as the diameter of the other of bulbous sections 28 and 30 is larger than the diameter of the rope. In this instance, the rope could be

inserted through the pet toy in only one direction.

[0015] A second advantage is that an edible pet treat 38, as shown in Figure 7, can be inserted through either opening 28 of bulbous section 14 or opening 30 of bulbous section 16 but is resiliently gripped by the interior surface of center section 18 defined by opening 32. Once the animal has chewed off the end of edible food treat 38, the remaining portion of the treat can be released by the animal chewing on the pet toy and deforming it so as to crush or dislodge edible food treat 38 from within opening 32. Thus, the interest of the animal in the pet toy of this invention can be maintained over an extended period of time because of the effort required to remove the entire edible treat from the pet toy.

[0016] Also, the edible treat can be longer than the length of the pet toy and extend out of both openings 28 and 30 while being resiliently held intermediate its ends by the interior surface defined by opening 32. After chewing off the ends of the treat, the remainder of the treat which is inside the pet toy will be reissued by the animal chewing on the pet toy to deform it so that the remainder of the treat is crushed and will fall out the ends of the pet toy. Alternatively, the treat can be shorter than the pet toy and positioned within it so that neither end is exposed. In order to remove any of treat in this instance, the animal must deform the pet toy by chewing on it to crush the treat so that it falls out of the ends of the pet toy.

[0017] By turning to Figures 8 and 9, another advantage of this invention can be seen. Conveniently, the ribs 24 function to clean the sides of the teeth of the animal when it bites down on bulbous section 14. Teeth 40 deflect area 42 on the opposite sides of side wall 19 inwardly so that ribs 24 engage the opposite sides of tooth 40 thus effecting the cleaning action. The deflection of area 42 also allows the gums 43 to be massaged by ribs 24. The same cleaning and massaging action will occur when the animal bites down on bulbous section 16 as well.

[0018] Another embodiment is shown in Figure 10 wherein pet toy 10' includes bulbous section 14' and 16' and center section 18' have a longitudinal center bore or opening 44 of substantially uniform cross-section. This pet toy will function similarly to that of Figures 1-7 except that bulbous sections 14' and 16' will be less easily deflected by the teeth of the animal. However, by changing the elasticity of the material from which the pet toy is made, it is possible to compensate for the greater thickness of the side wall 19' at bulbous sections 14' and 16'.

[0019] From the foregoing, the advantages of this invention are readily apparent. An elongated hollow pet toy has been provided which has spaced bulbous sections joined by a center section wherein the cross-section of the elongated body wall is substantially uniform throughout. This exterior configuration together with the hollow interior cause the pet toy to bounce in an irregular fashion when thrown on the floor or ground. The bulbous

sections can have the same diameters or different diameters. In either case, an opening is provided in the end of each bulbous section and at least one such opening is of a greater diameter than that of the opening in the center section so as to provide an anchoring surface for the knot on a pull rope with the pull rope extending through the other of such openings or to resiliently hold an edible food treat which is inserted through one of the openings in the bulbous end sections. Peripheral ribs

5 are spaced longitudinally along the bulbous sections of the pet toy to form grooves so that the animal can grasp the pet toy with its teeth. In one embodiment the pet toy has a thin wall of substantially constant cross-section which enhances the bouncing characteristics of the pet toy. When the teeth of the animal bite down on the pet toy, the side walls deform so that the ribs deflect inwardly to clean the teeth and/or massage the gums. In a second embodiment, the pet toy has a hollow core of substantially uniform diameter.

20

Claims

1. A pet toy (10,10') for entertaining an animal (22) and providing jaw exercise, teeth cleaning and/or gum massage for the animal, the pet toy comprising an elongated hollow body, having an outer peripheral surface extending along a longitudinal axis (12), and having first and second spaced bulbous sections (14,14',16,16') and a center section (18,18') between and connected to said first and second bulbous sections

characterised in that

a plurality of longitudinally spaced pairs of annular ribs (24) extend around said outer peripheral surface to facilitate the animal gripping said pet toy with its teeth, each of said pairs of ribs defining a first narrow groove (26) therebetween and adjacent pairs of ribs defining a second wider groove (27) therebetween, wherein said plurality of pairs of annular ribs (24) are disposed for engagement with both the teeth and with the gums, said elongated body deflecting such that said plurality of pairs of annular ribs (24) engages opposite sides of a tooth (40) when the animal bites down on said pet toy.

2. A pet toy (10), as claimed in claim 1, wherein:

50 said elongated body has a side wall (19) of substantially constant cross-section throughout; said first bulbous section (14) has a first opening (28) defining a first inner diameter and forming a first end of said elongated hollow body; said second bulbous section (16) has a second opening (30) defining a second inner diameter and forming a second end of said elongated hollow body; and

55 said center section (18) has a third inner diam-

eter which forms an inner surface defining a center opening (32) said third inner diameter being less than at least one of said firsts and second inner diameter.

3. A pet toy (10), as claimed in claim 2, further including:

a rope (34) extending through said elongated hollow body along said longitudinal axis having a fourth diameter smaller than either said first and second inner diameters and having an end with a knot (36) formed therein which knot (36) has a fifth diameter which is smaller than said at least one of said first and second inner diameter but is larger than said third inner diameter so that said knot (36) can pass through said at least one of said first and second inner diameters but not pass through said third inner diameter and engages said inner surface of said center section (18) as an anchor wherein said rope extends through the other of said at least one of said first and second openings to serve as a pull for said pet toy (10).

4. A pet toy (10), as claimed in claim 2, further including:

an edible animal treat (38) extending through and resiliently gripped in said center opening (32).

5. A pet toy (10), as claimed in claim 2, further including:

a first edible animal treat (38) extending through and resiliently gripped in said first opening (28); and
a second edible animal treat (38) extending through and resiliently gripped in said second opening (30).

6. A pet toy (10), as claimed in claim 2, further including:

an edible animal treat (38) having a length greater than that of said elongated hollow body, said edible food treat (38) extending through and resiliently gripped in said first and second openings (28, 30) and said center opening (32).

7. A pet toy (10), as claimed in claim 2, wherein:

said first and second inner diameters are different.

8. A pet toy (10), as claimed in claim 2, wherein:

said first and second inner diameters are the same.

9. A pet toy (10), as claimed in claim 1, further including:

a center hollow core (44) of substantially constant diameter extending along a longitudinal axis of said elongated hollow body;
said first bulbous section (14'), having a first wall thickness, forming a first end of said elongated hollow body;
said second bulbous section, having a second wall thickness, forming a second end of said elongated hollow body; and
said center section (18) having a thin deformable side wall with a third wall thickness which is less than at least one of said first and second wall thicknesses.

10. A pet toy, as claimed in claim 9, wherein:

said first and second wall thicknesses are equal.

Patentansprüche

1. Spielzeug (10,10') für Haustiere zum Unterhalten eines Tiers (22) und zum Erziehen eines Kiefertrainings, einer Zahnreinigung und/oder einer Zahnfleischmassage bei dem Tier, wobei das Spielzeug für Tiere einen langgestreckten, hohlen Körper aufweist, der eine äußere Umfangsoberfläche besitzt, die sich entlang einer Längsachse (12) erstreckt, und einen ersten und einen zweiten beabstandeten, ballonartigen Abschnitt (14,14';16,16') und einen Mittenabschnitt (18,18') zwischen dem ersten und dem zweiten ballonartigen Abschnitt und damit verbunden besitzt,
dadurch gekennzeichnet,
dass sich eine Mehrzahl von längs beabstandet in Paaren von ringförmigen Rippen (24) um die äußere Umfangsoberfläche herum erstreckt, um das Erfassen des Spielzeugs für Tiere durch das Tier mit seinen Zähnen zu erleichtern, wobei jedes der Paare der Rippen eine erste, schmale Nut (26) dazwischen definiert und angrenzende Paare von Rippen eine zweite, breitere Nut (27) dazwischen definieren,
wobei die Mehrzahl von Paaren von ringförmigen Rippen (24) für einen Eingriff mit sowohl den Zähnen als auch dem Zahnfleisch angeordnet ist, wobei sich der langgestreckte Körper so ablenkt, dass die Vielzahl von Paaren von ringförmigen Rippen (24) in gegenüberliegende Seiten eines Zahns (40) eingreift, wenn das Tier auf das Tierspielzeug beißt.

2. Spielzeug (10) für Tiere nach Anspruch 1, wobei:

der langgestreckte Körper eine Seitenwand (19) von im Wesentlichen konstantem Querschnitt insgesamt besitzt;
 5 der zweite, ballonartige Abschnitt (14) eine erste Öffnung (28) besitzt, die einen ersten, inneren Durchmesser definiert und ein erstes Ende des langgestreckten, hohlen Körpers bildet;
 der zweite, ballonartige Abschnitt (16) eine zweite Öffnung (30) besitzt, die einen zweiten, inneren Durchmesser definiert und ein zweites Ende des langgestreckten, hohlen Körpers bildet; und
 10 der Mittenabschnitt (18) einen dritten, inneren Durchmesser besitzt, der eine innere Oberfläche bildet, die eine Mittenöffnung (32) definiert, wobei der dritte, innere Durchmesser geringer als zumindest entweder der erste oder der zweite innere Durchmesser ist.

3. Spielzeug (10) für Tiere nach Anspruch 2, das weiterhin umfasst:

ein Seil (34), das sich durch den langgestreckten, hohlen Körper entlang der Längsachse erstreckt, mit einem vierten Durchmesser kleiner als entweder der erste oder der zweite innere Durchmesser und mit einem Ende mit einem Knoten (36), gebildet darin, wobei der Knoten (36) einen fünften Durchmesser besitzt, der kleiner als der mindestens eine des ersten und des zweiten inneren Durchmessers ist, allerdings größer als der dritte innere Durchmesser ist, so dass der Knoten (36) durch den mindestens einen des ersten und des zweiten inneren Durchmessers hindurchführen kann, allerdings nicht durch den dritten inneren Durchmesser hindurchführen kann, und in die Innere Oberfläche des Mittenabschnitts (18) als eine Verankerung eingreift, wobei sich das Seil durch die andere der mindestens einen der ersten und der zweiten Öffnung hindurch erstreckt, um als ein Ziehteil für das Spielzeug (10) für Tiere zu dienen.

4. Spielzeug (10) für Tiere nach Anspruch 2, das weiterhin umfasst:

einen essbaren Tiernahrungsmittelbestandteil (38), der sich durch die Mittenöffnung (32) hindurch erstreckt und elastisch darin in Eingriff gebracht ist.

5. Spielzeug (10) für Tiere nach Anspruch 2, das weiterhin umfasst:

einen ersten, essbaren Tiernahrungsmittelbe-

standteil (38), der sich durch die erste Öffnung (28) hindurch erstreckt und elastisch darin in Eingriff gebracht ist; und
 einen zweiten, essbaren Tiernahrungsmittelbestandteil (38), der sich durch die zweite Öffnung (30) hindurch erstreckt und elastisch darin in Eingriff gebracht ist.

6. Spielzeug (10) für Tiere nach Anspruch 2, das weiterhin umfasst:

einen essbaren Tiernahrungsmittelbestandteil (28), der eine Länge größer als diejenige des langgestreckten, hohlen Körpers besitzt, wobei sich der essbare Nahrungsmittelbestandteil (38) durch die erste und die zweite Öffnung (28,30) und die Mittenöffnung (32) hindurch erstreckt und elastisch darin in Eingriff gebracht ist.

7. Spielzeug (10) für Tiere nach Anspruch 2, wobei der erste und der zweite innere Durchmesser unterschiedlich sind.

8. Spielzeug (10) für Tiere nach Anspruch 2, wobei der erste und der zweite innere Durchmesser dieselben sind.

9. Spielzeug (10') für Tiere nach Anspruch 1, das weiterhin umfasst:

einen mittigen, hohlen Kern (44) von im Wesentlichen konstantem Durchmesser, der sich entlang einer Längsachse des langgestreckten, hohlen Körpers erstreckt;

wobei der erste, ballonartige Abschnitt (14'), der eine erste Wanddicke besitzt, ein erstes Ende des langgestreckten, hohlen Körpers bildet;

wobei der zweite, ballonartige Abschnitt, der eine zweite Wanddicke besitzt, ein zweites Ende des langgestreckten, hohlen Körpers bildet; und

wobei der Mittenabschnitt (18') eine dünne, deformierbare Seitenwand mit einer dritten Wanddicke besitzt, die geringer als mindestens eine der ersten und der zweiten Wanddicke ist.

10. Spielzeug für Tiere nach Anspruch 9, wobei die erste und die zweite Wanddicke gleich sind.

Revendications

1. Jouet pour animal de compagnie (10, 10') pour divertir un animal (22) et fournir à l'animal un exercice de la mâchoire, un nettoyage des dents et/ou un massage de la gencive, le jouet pour animal de compagnie comportant un corps creux allongé,

5 ayant une surface périphérique extérieure s'étendant le long d'un axe longitudinal (12), et ayant des premier et second tronçons espacés bulbeux (14, 14', 16, 16') et un tronçon central (18, 18') situé entre les premier et second tronçons bulbeux, et relié à ceux-ci, caractérisé en ce que

10 une pluralité de paires de nervures annulaires (24) espacées longitudinalement s'étendent autour de ladite surface périphérique pour faciliter la saisie par l'animal dudit jouet pour animal de compagnie à l'aide de ses dents, chacune desdites paires de nervures définissant une première gorge étroite (26) entre celles-ci, et des paires de nervures adjacentes définissant une seconde gorge plus large (27) entre celles-ci, ladite pluralité de paires de nervures annulaires (24) étant disposées pour mise en prise par les dents et les gencives, ledit corps allongé se déformant de telle sorte que ladite pluralité de paires de nervures annulaires (24) viennent en contact avec les côtés opposés d'une dent (40) lorsque l'animal mord ledit jouet pour animal de compagnie.

15 2. Jouet pour animal de compagnie (10) selon la revendication 1, dans lequel :

20 ledit corps allongé a une paroi latérale (19) d'une coupe transversale sensiblement constante d'un bout à l'autre, ledit premier tronçon bulbeux (14) a une première ouverture (28) définissant un premier diamètre intérieur, et formant une première extrémité dudit corps creux allongé, ledit second tronçon bulbeux (16) à une seconde ouverture (30) définissant un deuxième diamètre intérieur, et formant une seconde extrémité dudit corps creux allongé, et ledit tronçon central (18) a un troisième diamètre intérieur, qui forme une surface intérieure définissant une ouverture centrale (32), ledit troisième diamètre intérieur étant inférieur à au moins un desdits premier et deuxième diamètres intérieurs.

25 3. Jouet pour animal de compagnie (10) selon la revendication 2, comportant de plus :

30 une corde (34) s'étendant à travers ledit corps creux allongé le long dudit axe longitudinal, ayant un quatrième diamètre plus petit que l'un ou l'autre desdits premier et deuxième diamètres intérieurs, et ayant une extrémité munie d'un noeud (36) formé dans celle-ci, lequel noeud (36) a un cinquième diamètre qui est plus petit que ledit au moins un desdits premier et deuxième diamètres intérieurs, mais qui est plus grand qu' ledit troisième diamètre intérieur, de sorte que ledit noeud (36) peut passer à travers ledit au moins un desdits premier et deuxième diamètres intérieurs, mais ne peut pas passer à travers ledit troisième diamètre intérieur, et coopère avec ladite surface intérieure dudit tronçon central (18) sous la forme d'un ancrage, ladite corde s'étendant à travers l'autre desdites première et deuxième ouvertures pour servir à tirer ledit jouet pour animal de compagnie (10).

35 4. Jouet pour animal de compagnie (10) selon la revendication 2, comportant de plus :

40 une friandise comestible pour animal (38) s'étendant à travers ladite ouverture centrale (32), et saisie de manière élastique dans celle-ci.

45 5. Jouet pour animal de compagnie (10) selon la revendication 2, comportant de plus :

50 une première friandise comestible pour animal (38) s'étendant à travers ladite première ouverture (28), et saisie de manière élastique dans celle-ci, et une seconde friandise comestible pour animal (38) s'étendant à travers ladite seconde ouverture (30), et saisie de manière élastique dans celle-ci.

55 6. Jouet pour animal de compagnie (10) selon la revendication 2, comportant de plus :

60 une friandise comestible pour animal (38) ayant une longueur supérieure à celle dudit corps creux allongé, ladite friandise comestible pour animal (38) s'étendant à travers lesdites premières et secondes ouvertures (28, 30) et ladite ouverture centrale (32), et étant saisie de manière élastique dans celles-ci.

65 7. Jouet pour animal de compagnie (10) selon la revendication 2, dans lequel lesdits premier et deuxième diamètres intérieurs sont différents.

70 8. Jouet pour animal de compagnie (10) selon la revendication 2, dans lequel lesdits premier et deuxième diamètres intérieurs sont identiques.

75 9. Jouet pour animal de compagnie (10) selon la revendication 1, comportant de plus :

80 un noyau creux central (44) d'un diamètre sensiblement constant s'étendant le long d'un axe longitudinal dudit corps creux allongé, ledit premier tronçon bulbeux (14'), ayant une première épaisseur de paroi, formant une première extrémité dudit corps creux allongé,

ledit second tronçon bulbeux, ayant une deuxième épaisseur de paroi, formant un seconde extrémité dudit corps creux allongé, et ledit tronçon central 18' ayant une paroi latérale déformable mince ayant une troisième épaisseur de paroi qui est inférieure à au moins une desdites première et deuxième épaisseurs de paroi. 5

10. Jouet pour animal de compagnie selon la revendication 9, dans lequel lesdites première et deuxième épaisseurs de paroi sont égales.

15

20

25

30

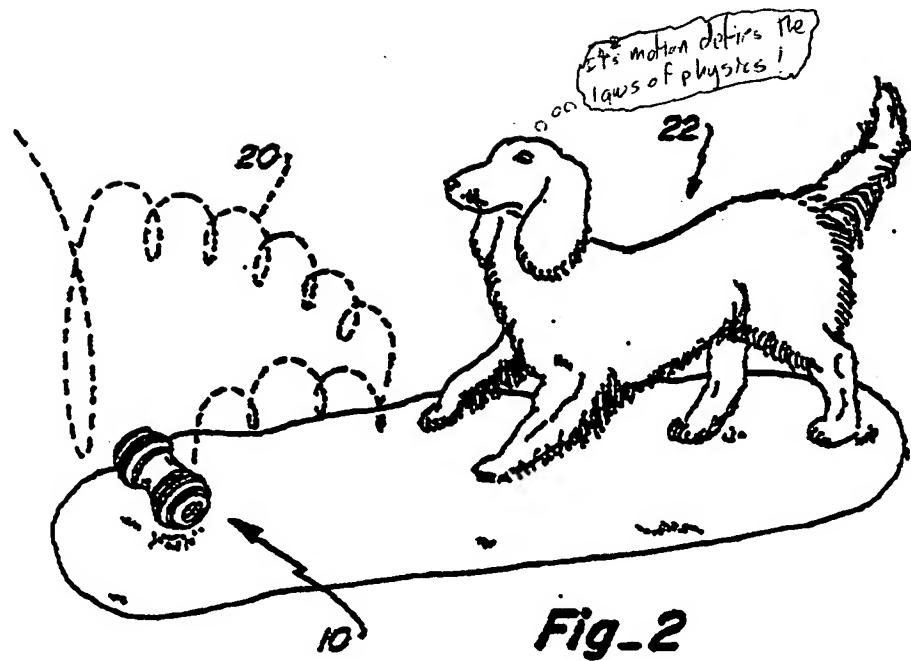
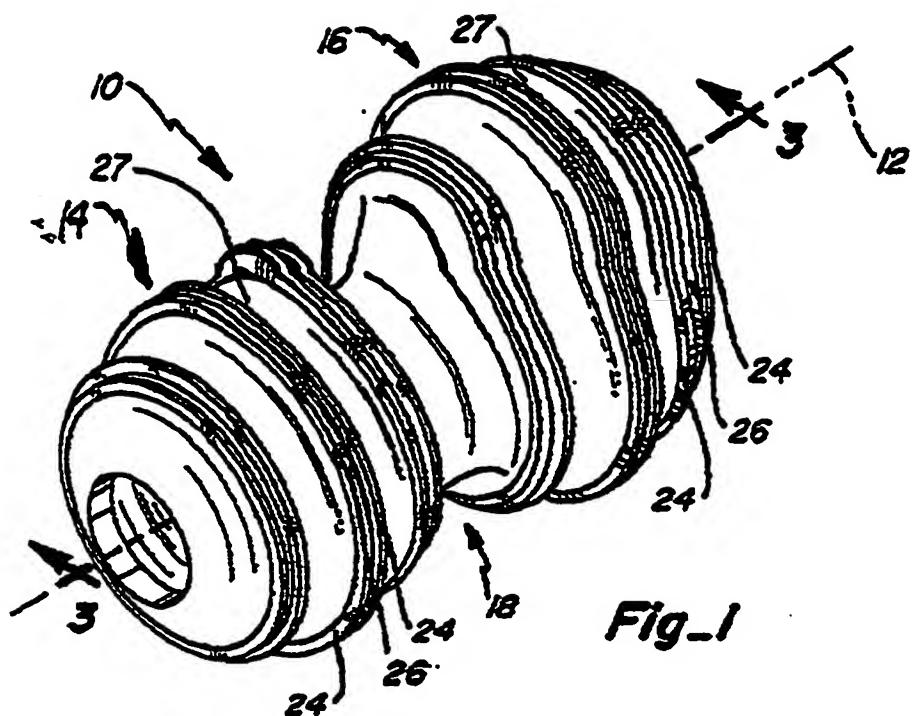
35

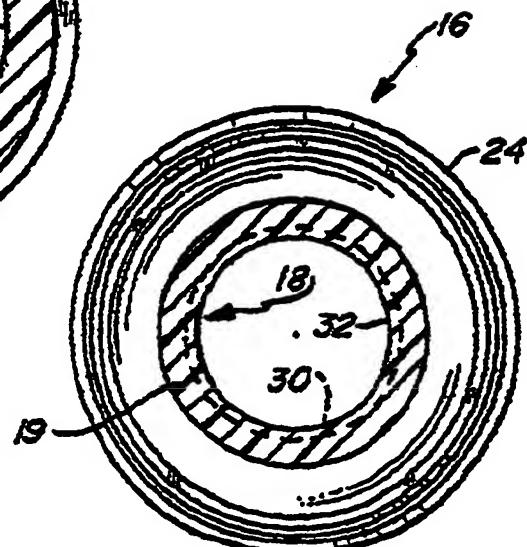
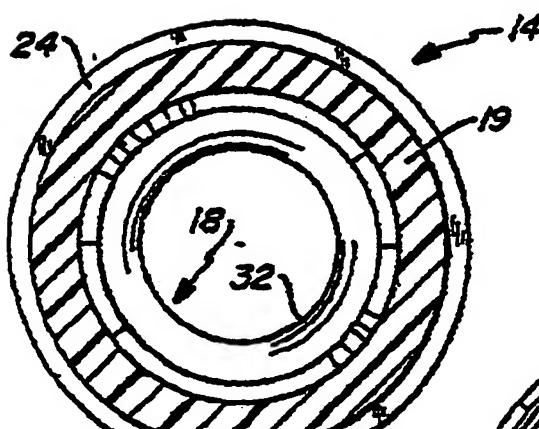
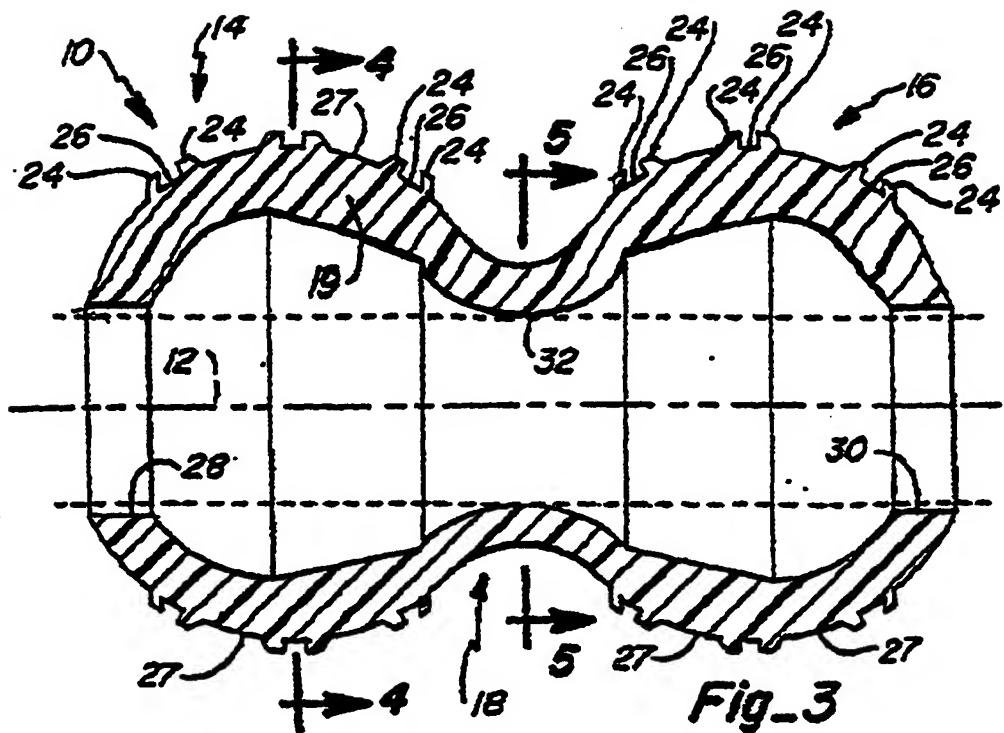
40

45

50

55





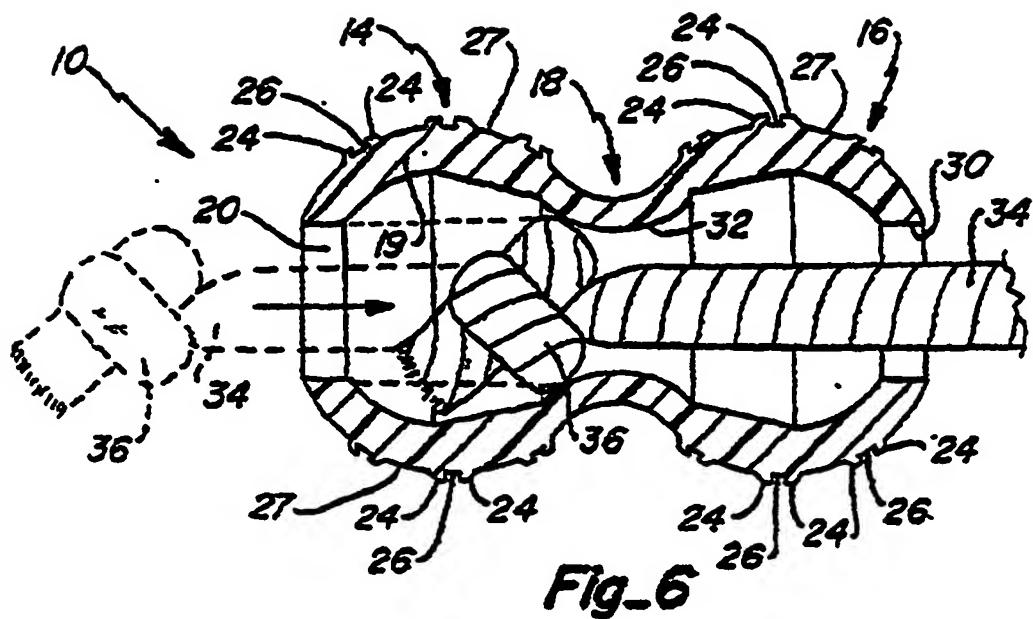


Fig-6

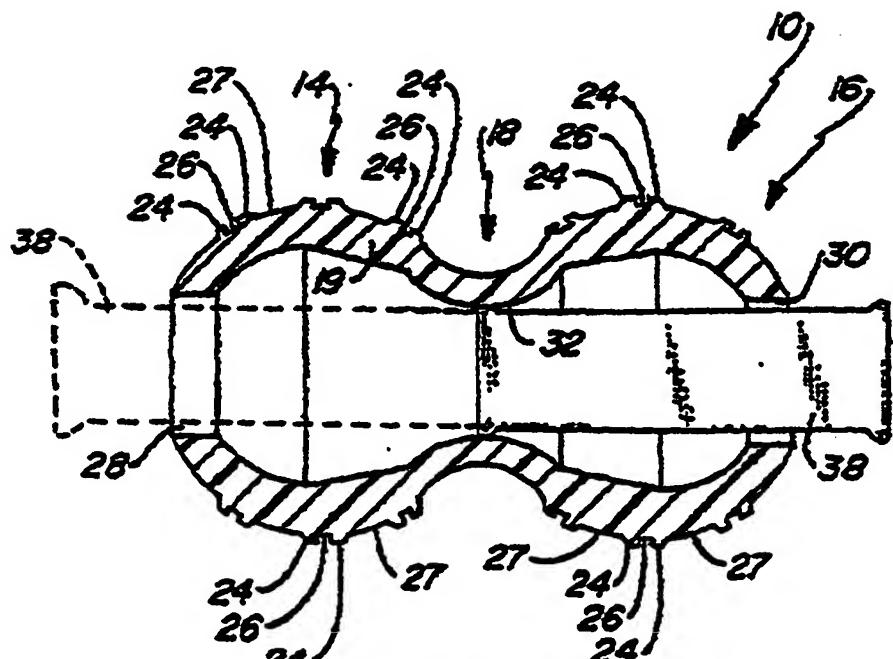


Fig-7

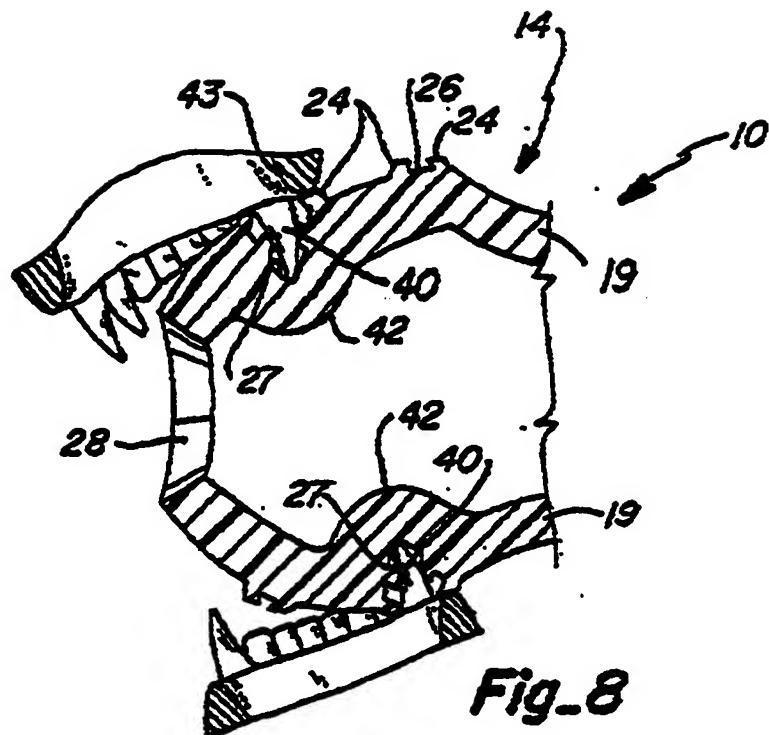


Fig. 8

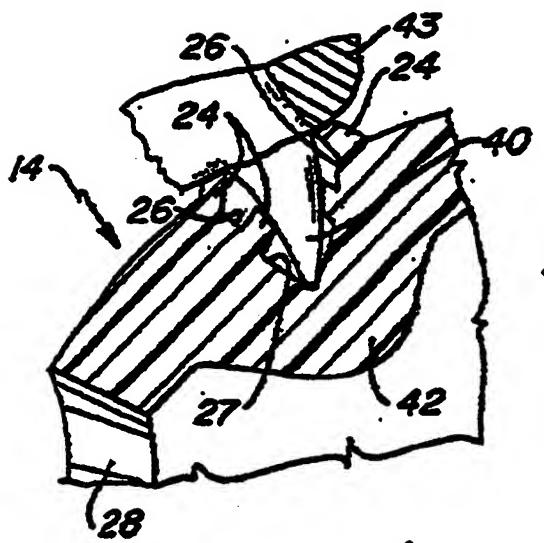


Fig. 9.

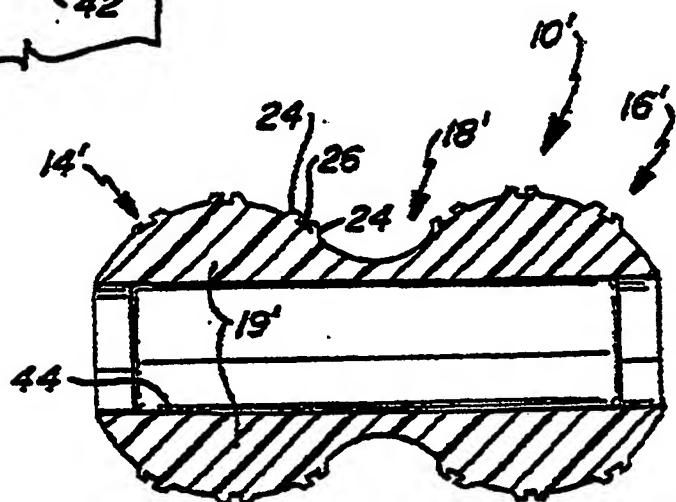


Fig-10